Claims

What is claimed is:

1. A framework for a composite application, the framework comprising:

an object access layer operable to exchange data with a plurality of enterprise base systems and to present the data to a composite application through a uniform interface;

a service layer operable to provide services to the composite application; and

a user interface layer operable to provide user interface patterns that facilitate information exchange between the composite application and a user.

2. The framework of claim 1, wherein a composite application comprises business objects, business services, and business processes, wherein a business service comprises an action performed on a business object, and a business process comprises a combination of business services.

3. The framework of claim 1, further comprising a database for composite application data, wherein the object access layer is further operable to provide local persistency in the database.

4. The framework of claim 3, wherein the object access layer is further operable to provide data synchronization and replication of enterprise base system data in the database.

5. The framework of claim 1, wherein the service layer comprises:

a collaboration services module operable to provide a collaboration service to the composite application; and

a workflow services module operable to provide a workflow to the composite application.

6. The framework of claim 5, wherein the collaboration services module is operable to link a semantic object to a business object of the composite application.

7. The framework of claim 5, wherein a workflow comprises templates, workflow patterns, and actions, a template describing a workflow procedure, workflow patterns describing portions of the template, and actions executing functions to carry out the workflow patterns.

8. The framework of claim 1, wherein the service layer further comprises a container for composite application services, the container operable to provide interfaces for non-framework-generated code.

9. The framework of claim 1, wherein the user interface layer further comprises a user interface framework that separates the user interface elements from the composite application so that the user interface is decoupled from the logic.

10. The framework of claim 1, further comprising:

a business object modeler operable to provide a user interface for constructing a business object; and

a business object generator operable to generate an executable version of the modeled business object.

11. The framework of claim 10, wherein the business object modeler comprises an object modeler and a relation modeler.

12. The framework of claim 10, wherein the business object generator comprises a generator framework and a persistency generator.

13. The framework of claim 10, wherein the business object generator is operable to code a business object template with metadata and relation data for a business object to generate an executable version of the modeled business object.

14. The framework of claim 13, wherein the business object generator is further operable to generate tables and proxies for a business object.

15. A method for implementing a composite application in a framework, the method comprising:

generating executable code for a composite application;

exchanging data with a plurality of enterprise base systems;

presenting the enterprise base system data to the composite application through a uniform interface; and

facilitating a user's interaction with the composite application through user interface patterns.

16. The method of claim 15, wherein generating executable code for a composite application comprises coding a template with business object metadata and relation data.

17. The method of claim 16, wherein generating executable code further comprises generating tables and proxies for a business object.

18. The method of claim 15, wherein a composite application comprises business objects, business services, and business processes, wherein a business service comprises an action performed on a business object, and a business process comprises a combination of business services.

19. The method of claim 15, further comprising providing local persistency in a database for composite application data.

20. The method of claim 19, further comprising providing data synchronization and replication of enterprise base system data in the database.

21. The method of claim 15, further comprising:

providing a collaboration service to the composite application; and

providing a workflow to the composite application.

22. The method of claim 15, further comprising providing a container for composite application services, the container operable to provide interfaces for non-framework-generated code portions.

23. The method of claim 15, further comprising providing user interfaces to model the composite application, the user interfaces allowing specification of attributes and relations for a business object of the composite application.

24. The method of claim 23, further comprising generating metadata for the business object and relations based on the specifications.

25. An article comprising a machine-readable medium storing instructions operable to cause one or more machines to perform operations comprising:

generating executable code for a composite application;

exchanging data with a plurality of enterprise base systems;

presenting the enterprise base system data to the composite application through a uniform interface; and

generating user interfaces for facilitating interaction between the composite application and a user by using user interface patterns.

26. The article of claim 25, wherein generating executable code for a composite application coding a template with business object metadata and relation data.

27. The article of claim 26, wherein generating a executable code further comprises generating tables and proxies for a business object.

28. The article of claim 25, wherein the instructions are further operable to cause one or more machines to perform operations comprising providing local persistency in a database for composite application data.

29. The article of claim 28, wherein the instructions are further operable to cause one or more machines to perform operations comprising providing data synchronization and replication of enterprise base system data in the database.

30. The article of claim 25, wherein the instructions are further operable to cause one or more machines to perform operations comprising:

providing a collaboration service to the composite application; and

providing a workflow to the composite application.

31. The article of claim 25, wherein the instructions are further operable to cause one or more machines to perform operations comprising providing a container for composite application services, the container operable to provide interfaces for non-framework-generated code portions.

32. The article of claim 25, wherein the instructions are further operable to cause one or more machines to perform operations comprising providing user interfaces to model the business object, the user interfaces allowing specification of attributes and relations for a business object of the composite application.

33. The article of claim 32, wherein the instructions are further operable to cause one or more machines to perform operations comprising generating metadata for the business object and relations based on the specifications.

34. A framework for developing and implementing a composite application, the framework comprising:

a database for composite application data;

an object access layer operable to:

exchange data with a plurality of enterprise base systems,

present the data to a composite application through a uniform interface,

provide local persistency in the database, and

provide data synchronization and replication of enterprise base system data in the database;

a service layer comprising:

a collaboration services module operable to provide a collaboration service to the composite application, and

a guided procedure services module operable to provide a guided procedure to the composite application;

a user interface layer operable to provide user interface patterns for displaying information relating to the composite application, the user interface layer comprising a user interface framework that separates the user interface elements from the composite application so that the user interface is decoupled from the logic;

a business object modeler operable to provide a user interface for constructing a business object of the composite application; and

a business object generator operable to generate an executable version of the modeled business object.

35. The framework of claim 34, wherein the business object modeler comprises an object modeler and a relation modeler.

36. The framework of claim 34, wherein the business object generator comprises a generator framework and a persistency generator.

37. The framework of claim 36, wherein the business object generator is operable to code a business object template with metadata and relation data for a business object to generate an executable version of the modeled business object and to generate tables and proxies for a business object.

38. The framework of claim 34, wherein a composite application comprises business objects, business services, and business processes, wherein a business service comprises an action performed on a business object, and a business process comprises a combination of business services.

39. The framework of claim 34, wherein the collaboration services module is operable to link a semantic object to a business object of the composite application.

40. The framework of claim 34, wherein a guided procedure comprises templates, workflow patterns, and actions, a template describing a guided procedure, workflow patterns describing portions of the template, and actions executing functions to carry out the workflow patterns.

41. The framework of claim 34, wherein the service layer further comprises a container for composite application services, the container operable to provide interfaces for non-framework-generated code.